

What is claimed is:

1. A moving image conversion apparatus comprising:  
sampling means for sampling frames from a moving image;

and

5 multimedia image generation means for generating a  
multimedia image in a multimedia format by compressing the  
frames according to a compression method considering  
two-dimensional redundancy.

10 2. The moving image conversion apparatus according to  
Claim 1, wherein the multimedia image generation means  
generates the multimedia image in such a manner that the  
multimedia image can be displayed on a display device in  
accordance with a characteristic of the display device.

15 3. The moving image conversion apparatus according to  
Claim 2, wherein the multimedia image generation means  
comprises:

size change means for enlarging or reducing the frames  
according to the characteristic of the display device;

20 frame compression means for compressing the frames by  
the compression method considering two-dimensional redundancy  
so that a data size of the multimedia image can be dealt with  
by the display device; and

25 format compilation means for generating the multimedia  
image by compiling the frames compressed by the frame  
compression means into the format.

4. The moving image conversion apparatus according to

Claim 3, wherein

the frame compression means repeats changing of a compression ratio of the frames and/or thinning of the frames until the data size of the multimedia image becomes the data 5 size that can be dealt with by the display device in the case where the multimedia image does not have the data size that can be dealt with by the display device.

5. The moving image conversion apparatus according to Claim 2, wherein the display device is a mobile terminal.

10 6. A moving image transmission apparatus for sending a moving image to a terminal requesting transfer of the moving image, the moving image transmission apparatus comprising:  
model judgment means for judging a model of the terminal;  
and

15 moving image conversion means for converting the moving image into a multimedia image in a multimedia format in the case where the model of the terminal is not capable of moving image display but enables multimedia image display, whereby  
the moving image transmission apparatus sends the

20 multimedia image instead of the moving image to the terminal.

7. The moving image transmission apparatus according to Claim 6, further comprising:

reduced-color moving image conversion means for  
converting the moving image into a reduced-color moving image  
25 in the case where the model of the terminal can carry out neither  
moving image display nor multimedia image display but enables

reduced-color moving image display, whereby

the moving image transmission apparatus sends the reduced-color moving image instead of the moving image to the terminal.

5        8. The moving image transmission apparatus according to Claim 6, wherein the moving image conversion means comprises:

sampling means for sampling frames from the moving image; and

10        multimedia image generation means for generating the multimedia image by compressing the frames according to a compression method considering two-dimensional redundancy.

9. A moving image conversion method comprising the steps of:

15        sampling frames from a moving image; and  
generating a multimedia image in a multimedia format by compressing the frames according to a compression method considering two-dimensional redundancy.

10. A moving image transmission method for sending a moving image to a terminal requesting transfer of the moving image, the moving image transmission method comprising the steps of:

judging a model of the terminal;  
converting the moving image into a multimedia image in a multimedia format in the case where the model of the terminal is not capable of moving image display but enables multimedia

image display; and

sending the multimedia image instead of the moving image to the terminal.

11. A program causing a computer to execute a moving  
5 image conversion method, the program comprising the steps of:

sampling frames from a moving image; and  
generating a multimedia image in a multimedia format by compressing the frames according to a compression method considering two-dimensional redundancy.

10 12. A program causing a computer to execute a moving image transmission method for sending a moving image to a terminal requesting transfer of the moving image, the program comprising the steps of:

judging a model of the terminal;

15 converting the moving image into a multimedia image in a multimedia format in the case where the model of the terminal is not capable of moving image display but enables multimedia image display; and

sending the multimedia image instead of the moving image  
20 to the terminal.

13. A moving image conversion apparatus for converting a moving image comprising frames into a reduced-color moving image having a predetermined number of colors, the moving image conversion apparatus comprising:

25 reference frame generation means for generating a reference frame representing the frames;

palette data generation means for generating a palette data set including the predetermined number of colors from the reference frame;

frame sampling means for sampling, from the frames,  
5 reduced-color moving image generation frames to be used for generating the reduced-color moving image;

color reduction processing means for converting the reduced-color moving image generation frames into reduced-color moving image frames by using the palette data  
10 set; and

frame compilation means for compiling the reduced-color moving image from the reduced-color moving image frames.

14. The moving image conversion apparatus according to Claim 13, wherein the reference frame generation means generates the reference frame from all or a part of the frames comprising the moving image.

15. A moving image transmission apparatus for sending a moving image to a terminal requesting transfer of the moving image, the moving image transmission apparatus comprising:

20 model judgment means for judging a model of the terminal;  
and

reduced-color moving image conversion means for converting the moving image into a reduced-color moving image in the case where the model is incapable of moving image display  
25 but capable of reduced-color moving image display, whereby the moving image transmission apparatus sends the

reduced-color moving image instead of the moving image to the terminal.

16. The moving image transmission apparatus according to Claim 15, wherein the reduced-color moving image conversion means comprises:

reference frame generation means for generating a reference frame representing frames comprising the moving image;

palette data generation means for generating a palette data set including a predetermined number of colors from the reference frame;

frame sampling means for sampling, from the frames, reduced-color moving image generation frames to be used for generating the reduced-color moving image;

color reduction processing means for converting the reduced-color moving image generation frames into reduced-color moving image frames according to the palette data set; and

frame compilation means for compiling the reduced-color moving image from the reduced-color moving image frames.

17. A moving image conversion method for converting a moving image comprising frames into a reduced-color moving image having a predetermined number of colors, the moving image conversion method comprising the steps of:

generating a reference frame representing the frames; generating a palette data set including the

predetermined number of colors from the reference frame;  
sampling, from the frames, reduced-color moving image  
generation frames to be used for generating the reduced-color  
moving image;

5       converting the reduced-color moving image generation  
frames into reduced-color moving image frames according to the  
palette data set; and

compiling the reduced-color moving image from the  
reduced-color moving image frames.

10      18. A program causing a computer to execute a moving  
image conversion method for converting a moving image  
comprising frames into a reduced-color moving image having a  
predetermined number of colors, the program comprising the  
steps of:

15      generating a reference frame representing the frames;  
generating a palette data set including the  
predetermined number of colors from the reference frame;  
sampling, from the frames, reduced-color moving image  
generation frames to be used for generating the reduced-color  
20     moving image;

converting the reduced-color moving image generation  
frames into reduced-color moving image frames according to the  
palette data set; and

25     compiling the reduced-color moving image from the  
reduced-color moving image frames.

19. A moving image transmission method for sending a

moving image to a terminal requesting transfer of the moving image, the moving image transmission method comprising the steps of:

judging a model of the terminal;

5       converting the moving image into a reduced-color moving image in the case where the model is not capable of moving image display but is capable of reduced-color moving image display; and

10      sending the reduced-color moving image instead of the moving image to the terminal.

20. A program causing a computer to execute a moving image transmission method for sending a moving image to a terminal requesting transfer of the moving image, the program comprising the steps of:

15      judging a model of the terminal;

          converting the moving image into a reduced-color moving image in the case where the model is not capable of moving image display but is capable of reduced-color moving image display; and

20      sending the reduced-color moving image instead of the moving image to the terminal.